Summary of well testing near coal ash ponds

The N.C. Department of Environment and Natural Resources, or DENR, updated on June 11 individual results from testing conducted at public and private water supply wells near Duke Energy's 14 coal-fired electrical generating facility boundaries.

Spreadsheet updated

Staff members have updated the spreadsheet that provides a detailed account of the results at each individual well where tests have been conducted and the state has confirmed that the well owners have received the results of those tests. The spreadsheet compares the individual results of testing for coal ash-related metals and constituents with state and federal water quality thresholds, if such a threshold exists. The updated spreadsheet includes additional results for 54 wells since the May 19 spreadsheet was made public.

Well test results summary updated

DENR also updated its summary of well test results on June 11. The summary of well test results includes information on 35 additional wells since the May 19 report. The summary includes all results sent back to DENR, whereas the spreadsheet includes only results where well owner receipt has been confirmed. Thus, the summary numbers and the spreadsheet numbers are different.

Additionally, well retesting data has been posted for 19 wells that previously received resample recommendations from DHHS. These well results are listed on the spreadsheet in addition to the well's original sample results and are identified with an "R" at the end of the well owner I.D. listing.

Health risk evaluations summary updated

DENR has updated the number of health risk evaluations that were determined by the N.C. Department of Health and Human Services and sent to homeowners along with the well test results. The updated summary includes information on 230 health risk evaluations that have been received by well owners.

How to interpret the results (below)

The bold number in brackets – for example (+1) - indicates the numbers added since the initial figures were made public April 30.

Summary of wells tested (as of June 9, 2015)

Totals

- 438 wells identified for possible testing (+93)
- 242 wells with results back to the state (+35)
- 224 wells exceeded a state 2L standard or an interim standard known, or IMAC (+33) Allen Steam Station (Belmont, N.C.)
- 141 wells identified to date (+18)
- 109 wells with results back (+23)
- 105 exceeded a 2L standard or IMAC (+22)
- Exceedances for: (Antimony), (Thallium), (Zinc), (Cobalt), Iron, Vanadium, pH

Asheville Plant (Asheville, N.C.):

- 14 wells identified to date (+3)
- 4 wells with results back
- 4 wells exceeded a 2L standard
- Exceedances for: pH, total suspended solids, Sulfate

Belews Creek Steam Station (Belews Creek, N.C.)

- 24 wells identified to date (+13)
- 8 wells with results back
- 6 wells exceeded a 2L standard or IMAC
- Exceedances for: Iron, Vanadium, pH

Buck Steam Station (Salisbury, N.C.)

- 100 wells identified to date (+32)
- 45 wells with results back (+7)
- 44 wells exceeded a 2L standard or IMAC (+7)
- Exceedances for: (Antimony), (Cobalt), (Lead), (Manganese), (Zinc), (Sulfate), Iron,

Vanadium, pH, (Total Dissolved Solids)

Cliffside Steam Station (Mooresboro, N.C.)

- 30 wells identified (+8)
- 17 wells with results back (+2)
- 10 exceeded a 2L standard or IMAC
- Exceedances for: Cobalt, Iron, Manganese, Vanadium, pH

H.F. Lee Plant (Goldsboro, N.C.)

- 34 wells identified (+14)
- 10 wells with results back (+2)
- 9 exceeded a 2L standard (+2)
- Exceedances for: Cobalt, Manganese, pH

Marshall Steam Station (Terell, N.C.)

- 46 wells identified
- 26 wells with results back
- 25 exceeded a 2L standard or IMAC
- Exceedances for: Cobalt, Iron, Lead, Manganese, Vanadium, pH

Mayo Steam Station (Roxboro, N.C.)

- 6 wells identified to date (+1)
- 2 wells with results back
- 2 wells exceeded a 2L standard or IMAC
- Exceedances for: Iron, Lead, Vanadium, Manganese, pH

Roxboro Steam Station (Semora, N.C.)

- 14 wells identified to date (+3)
- 7 wells with results back
- 6 wells exceeded a 2L standard or IMAC
- Exceedances for: Manganese, Vanadium, pH, Iron, Chloride, Total Dissolved Solids Sutton Plant (Wilmington, N.C.)
- 21 wells identified to date (+1)
- 12 wells with results back (+1)
- 11 exceeded a 2L standard or IMAC (+1)
- Exceedances for: Cobalt, Iron, Manganese, Vanadium, pH

Weatherspoon Plant (Lumberton, N.C.)

- 8 wells identified to date
- 2 well with results back
- 2 well exceeded the 2L standard
- Exceedances for: pH

Summary of health risk evaluations produced by the N.C. Department of Health and Human Services (**As of June 9**th)

Totals

- Total wells with letters and health risk evaluations: 230 (+39)
- HREs with okay recommendation: 12 (+2)
- Wells with "Do Not Drink" HREs from DHHS: 205 (+39)
- DHHS resample recommendations: 102 (+6)
- Wells with resampled results: 19 (+19)

Allen Steam Station (Belmont, N.C.) First round tests

- Total wells with letters and health risk evaluations: 107 (+21) (all are private wells)
- HREs with okay recommendation: 2 (+1)
- Wells with "Do Not Drink" HREs from DHHS: 103 (+20)
- 45 for vanadium only (+2)
- 45 for chromium 6 and vanadium (+18)
- 8 for iron and vanadium (unchanged)
- 3 for vanadium, chromium 6 and iron (+1)
- 1 for vanadium, chromium 6 and thallium (unchanged)
- 1 for chromium 6 and cobalt (unchanged)
- 1 for vanadium, Cr6, iron, lead (new category)
- 1 alert for high sodium (unchanged)
- DHHS resample recommendations: 48 for chromium 6 and inorganics; 0 for lead and copper. (unchanged)

Allen resample results – 17 results counted

- 12 previous vanadium only results re-evaluated as vanadium and chromium 6
- 5 previous vanadium, iron results revalued as vanadium and chromium 6

Asheville Plant (Asheville, N.C.) No change for June 9 numbers

- Total wells with letters and HREs: 4 (private)
- HREs with okay recommendation: 2
- Wells with "Do Not Drink" HREs from DHHS: 0
- DHHS resample recommendations: 2 (both for chromium 6 and inorganics)

Belews Creek Steam Station (Belews Creek, N.C.) No change for June 9 numbers

- Total wells with letters and HREs: 7 (private)
- HREs with okay recommendation: 2
- Wells with "Do Not Drink" HREs from DHHS: 4 (2 for vanadium only and 2 for iron only)
- DHHS resample recommendations: 3 for both chromium 6 and inorganics

Buck Steam Station (Salisbury, N.C.)

- Total wells with letters/HREs: 39 (+4) private; 3 public
- HREs with okay recommendation: 1 (unchanged)
- Wells with "Do Not Drink" HREs from DHHS: 39 (+4)
- 12 for vanadium only (unchanged)
- 5 for vanadium and iron (unchanged)
- 14 for chromium 6 and vanadium (+3)
- 1 for vanadium and lead (unchanged)
- 1 for manganese, sodium and sulfate (unchanged)
- 1 for zinc (unchanged)
- 1 for iron (unchanged)
- 1 for chromium 6, vanadium and iron (unchanged)
- 1 for cobalt, vanadium, iron chromium 6 (correction)
- 1 for vanadium, manganese, iron (new category)
- DHHS resample recommendations: 13 for chromium 6 and inorganics (unchanged)
- 1 for lead and copper (unchanged)

Cliffside Steam Station (Mooresboro, N.C.)

- Total wells with letters/HREs: 15(+4)(private)
- HREs with okay recommendation: 1(+1)
- Wells with "Do Not Drink" HREs from DHHS: 12 (+4)
- 1 for vanadium only (unchanged)
- 1 for vanadium and iron (unchanged)
- 4 for iron (+1)
- 2 for cobalt, iron and manganese (unchanged)
- 3 for chromium 6 (+2)
- 1 for vanadium, cobalt, iron (new category)
- DHHS resample recommendations: 8 for chromium 6 and inorganics (unchanged)

H.F. Lee Plant (Goldsboro, N.C.)

- Total wells with letters/HREs: 11 (+6) (private)
- HREs with okay recommendation from DHHS: 0 (unchanged)
- Wells with "Do Not Drink" HREs from DHHS: 10 (+5)
- 5 for cobalt (+3)
- 1 for chromium 6 (unchanged)
- 2 for cobalt and manganese (unchanged)
- 1 vanadium (new category)
- 1 cobalt, iron, manganese (new category)
- DHHS resample recommendations: 4 (chromium 6 and inorganics)

Marshall Steam Station (Terell, N.C.)

- Total wells with letters/HREs: 25 (+2)private; 1 public
- HREs with Okay recommendation from DHHS: 0 (unchanged)
- Wells with "Do Not Drink" HREs from DHHS: 23 (+2)
- 10 for vanadium only (+1)

- 3 for iron and vanadium (unchanged)
- 1 for lead and vanadium (unchanged)
- 4 for chromium 6 and vanadium (unchanged)
- 3 for iron, manganese and vanadium (unchanged)
- 1 for chromium 6 (unchanged)
- 1 for vanadium, iron, chromium 6 (new category)
- DHHS resample recommendations: 17 (16 for chromium 6 and inorganics; 1 for lead and copper) (unchanged)

Marshall resample results – 2 results counted (as of June 9)

- 1 previous vanadium only results re-evaluated as vanadium and chromium 6
- 1 previous vanadium, iron results re-evaluated as vanadium

Mayo Steam Station (Roxboro, N.C.) No change for June 9 numbers

- Total wells with letters/HREs: 1
- Wells with "Do Not Drink" HREs from DHHS: 1 (for lead, iron and vanadium)
- DHHS resample recommendations: 2 (1 for chromium 6 and inorganics; 1 for lead and copper).

(NOTE: A separate notation stated that high sodium could be an issue for people with sodium health issues).

Roxboro Steam Station (Semora, N.C.)

- Total wells with letters/HREs: 5 private (+1), 2 public (+2)
- HREs with Okay recommendation from DHHS: 0 (unchanged)
- Wells with "Do Not Drink" HREs from DHHS: 7 (+3)
- 2 for vanadium (unchanged)
- 1 for chromium 6 manganese and vanadium (unchanged)
- 1 for vanadium, chromium 6 and lead (unchanged)
- 1 for chromium 6 (new category)
- 1 for manganese and chloride (new category)
- 1 for manganese and iron (new category)
- DHHS resample recommendations: 1 for chromium and inorganics; 1 for lead (unchanged)
- 4 Wells with high sodium (+3)

Sutton Plant (Wilmington, N.C.)

- Total wells with letters/HREs: 9 (+1)private and 2 public
- HREs with Okay recommendation from DHHS: 3 (unchanged)
- Wells with "Do Not Drink" HREs from DHHS: 6 (+1)
- 3 for manganese and cobalt (correction) (unchanged)
- 1 for vanadium, manganese, cobalt, iron, sodium (unchanged)
- 1 for manganese, cobalt and sodium (unchanged)
- 1 for manganese, cobalt and iron (unchanged)
- DHHS resample recommendations: 3 chromium 6 and inorganics

Weatherspoon Plant (Lumberton, N.C.)

- Total wells with letters/HREs: 2 (+1)
- HREs with Okay recommendations from DHHS: 1(unchanged)
- Wells with "Do Not Drink" HREs from DHHS: 0 (unchanged)
- 1 Resample for chromium 6 and organics

Contacts

For information on health risk evaluations, contact the DHHS media line at 919-855-4840. Contacts include Kendra Gerlach at Kendra.Gerlach@dhhs.nc.gov or Alexandra Lefebvre@dhhs.nc.gov.

For information on well testing not related to health risk evaluations, contact the DENR Office of Public Affairs at 919-707-8624, 919-707-8602, 919-707-9033 or 919-707-9014. Contacts include Crystal Feldman, Crystal:Feldman@ncdenr.gov, Jamie Kritzer, Jamie.Kritzer@ncdenr.gov, Sarah Young, Sarah.Young@ncdenr.gov, or Susan Massengale, Susan.Massengale@ncdenr.gov.